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From Cafeteria to Classroom

A composting program for the Eslie J. Parquette School

A private special purpose school in Saco, Maine

By

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Program of Study Committee:

Dr. Scott Smalley, Major Professor

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Chapter 1 – Introduction

Food waste is a worldwide issue. In the United States we throw away roughly 60 million tons of food and yet more than 41 million Americans face food insecurity with 13 million of them children (WWF, n.d.). Reducing food waste will not solve world hunger, but taking measures to waste less can positively affect food insecurity, the economy and the environment. Composting is one of the many approaches to reducing food waste, and can provide a unique opportunity to raise awareness and education about how much food is discarded. In the United States more than four billion lunches are served everyday and unfortunately a portion of that gets wasted as well. Incorporating composting as a teaching method and waste reduction tool opens up cafeterias to become classrooms and provides students with the chance to learn healthy life skills they can carry with them (WWF, n.d.). Providing students with the opportunity to be involved with the composting process creates a sense of ownership and empowers the students to share their knowledge with the community around them.

I have been considering how to bring composting to my school for some time, especially because we have a working farm program that could utilize the compost. The main problem was finding the time for someone to really own the project, and with everyone so busy it just didn't seem possible. Then I started researching an outside source to pick up our compost therefore eliminating some of the responsibility of the compost process from the school staff. I reached out to Garbage to Garden, a compost service that provides homes, schools and commercial businesses a convenient way to recycle food scraps, as a potential resource. They provide training, educational tools, bins for easy pick up and have found a lot of success in school settings. This would allow students the opportunity to learn about composting and food waste, but would not put a heavy burden on staff.

The Esle J. Parquette School is a private special purpose school, which provides special education curriculum to support students struggling with social, emotional, and academic challenges. The school is part of a larger mental health organization called Sweetser and shares a campus with other mental health programs. The school and residential programs currently provide services for approximately 80 students ranging from five to twenty years old. Students come to the school when their current district can no longer provide programming for them so students often come and go throughout the school year. At the Esle J. Parquette school we have students from across the southern half of Maine for a wide variety of reasons. Truancy, verbal and physical aggression, elopement, problematic sexualized behaviors, and work refusal are some of the most common reasons students are recommended for the school. All students are special ed designated and have Individualized Education Plans outlining their goals, both academic and behavioral, for attending the school. Most students who attend the school have experienced extensive trauma in their life and we work to not only teach academics but more importantly to teach healthy relationships with themselves and the world around them. Each child has a clinician that they meet with throughout the week and there are multiple clinical groups that students attend. The school offers an experiential learning program that provides pre-vocational and life skills to middle and high school students and includes farm, auto, woodshop, culinary, and media arts as units.

Often academics are an area of frustration amongst my students so creating simple and enjoyable activities will help students remain engaged. Also students come and go throughout the school year, so I wanted to develop simple activities that can be done at any time to teach students about the composting project. The school provides each student with a lunch everyday, which results in waste. The kitchen and culinary program also produces waste, which could be

included in the composting program. We work hard at the farm to teach students about where their food comes from, and introducing composting would be a great way to complete the cycle and teach kids where their food goes once they are done. The purpose of this program is to create a sense of awareness of the issue of food waste and to create another positive connection with the world around them.

Chapter 2 – Literacy Review

We currently produce enough food for everyone on the planet, but 815 million people worldwide are suffering from chronic undernourishment (The United Nations Food and Agriculture Organization, 2019). Worldwide, an estimated one-third of all food produced for human consumption is lost or wasted, but recent spikes in food prices have increased concern about global food shortages (Food and Agricultural Organization of the United Nations, 2019). People often believe the answer to solving food shortages is agriculture, ignoring the issue of food waste and its impact on food supply. Developing an effective food strategy is necessary to meet the needs of the world population while limiting impact to the environment (WWF, n.d.). Increasing efficiency and productivity in all steps in food production along with reducing food waste will be essential in creating a sustainable food system (WWF, n.d.). If a quarter of the food wasted could be saved it would be enough to feed 87 million hungry people (UNEnvironment, n.d.). Although it is not as simple as sending extra food to places in need reducing food waste is a huge opportunity to make positive changes for the economy, environmental sustainability, and food security and safety. By reducing food waste we can focus on feeding people not landfills.

In developing countries a large portion of food waste is lost due to lack of proper storage, but in developed countries like the United States food is often wasted for more superficial reasons. It is estimated one in seven truckloads of perishables delivered is thrown away, often due to aesthetics (Gunders, 2012). Food in the United States is cheaper and more available than in developing countries therefore seeming expendable. The United States throws away around 60 million tons or 160 billion dollars worth of produce annually with most of it ending up in landfills (Chandler, 2016). Once in landfills waste decomposes slowly releasing methane, which has 25 percent more heat-trapping capability than carbon dioxide (Natural Resource Council of

Maine, 2019). Wasted food is responsible for roughly eight percent of global greenhouse gas emissions, depletes world water sources, and is a major contributor to deforestation (WWF, n.d.). More than 40 percent of food waste occurs at the retail and consumer levels, which provides an opportunity for consumers to take steps towards waste reductions (UNEnvironment, n.d.). With proper education and opportunities people can learn to make sustainable food choices. Providing consumers with increased communication, awareness and education people can begin to make more informed decisions about where their food came from and where it goes once they are done with it.

Schools provide a unique opportunity to educate youth about food waste and ways to reduce it. With schools providing more than four billion lunches per year to their students it can turn “cafeterias to classrooms” and can help develop healthy lifestyle choices and responsible habits for the future (WWF, n.d.). Schools attempt to provide students with meals that are both balanced and affordable for school nutrition programs. Students often do not eat the meals for various reasons such as they do not have enough time, do not like the food offered, or there is no option to save the food for later. This results in millions of dollars in wasted food, and a study done among middle school students in Boston found that \$423,349 (26.1% of the total food budget) was wasted every year (Cohen, Richardson, Austin, Economos, & Rimm, 2013). School food waste is not limited to students’ trays, but also includes the waste produced in the kitchens. Over-ordering, overproduction, expiration, spoilage, and trim waste account for approximately four to ten percent of the food that it wasted. Inconsistent attendance, poor weather and lack of data surrounding how much is going to be needed to serve students all contribute to food waste issues in the cafeteria.

Research indicates schools produce a substantial amount of food waste, but there are approaches to reducing waste that can be done in the cafeteria. Composting is often a great starting point for reducing food waste in schools. Composting would allow any food scraps or organic material that are not safe to eat by humans or animals to be used in a sustainable way (ecomaine, 2019). Once compost is collected it can be used to return nutrients back to the soil, provide other forms of sustainable energy to power homes and business, and has numerous benefits for air quality, clean water, and soil (ecomaine, 2019). Composting provides students with the opportunity to become aware of the waste and see it as a potential resource instead of something gross. Composting offers teachers and students learning opportunities and chances for growth by challenging their current thought processes and providing topics for exploration.

Allowing students to take part composting in the cafeteria builds a sense of ownership and environmental stewardship that they can bring home to their families and with them in the future. Compost is part of a cycle and can be used as a source of school pride and is important for building a sustainable school community (Berry & Acheson, 2017). Composting is an essential part of an environmentally sound community, whether that is a school or a town, and provides an opportunity to reduce food waste and the problems that come with it. This program will address the issues of food waste on campus by introducing composting to staff and students. On campus we have a working farm where students are taught where their food comes from so introducing composting would be a great way to complete the cycle and teach people where their food goes once they are done. The purpose of this program is to create a sense of awareness about the issue of food waste and to create another positive connection with the world around them.

Chapter 3 – Methods and Procedures

3.1 – Program Development

When I began developing the idea of a compost program the first resource I reached out to was the kitchen staff. They are responsible for providing all students with lunch every day and also provide dinners for the residential program staff and clients Monday through Friday each week. All meals are cooked in the cafeteria kitchen at the school and therefore all their food waste from cooking would be included in the composting program. Earlier in the school year I attended the Maine Ag in the Classroom conference with Jason Gregoire, the head of the kitchen, and we discussed how we could incorporate composting at our school. We talked about offsite composting and he agreed this seemed like the most reasonable approach to composting at our school and the kitchen staff would be willing to help in any way.

My next step was to reach out to an offsite-composting program. I contacted Lydia Foxall at Garbage to Garden as they provide a curbside compost service to schools, commercial businesses and homes. They pick up food scraps, including meat, dairy, and bones, provide toters at no cost and offer signage for waste stations which include visuals and verbiage to help with the sorting process. In Saco they pick up on Tuesday and Fridays, and would be willing to pick up once or twice a week depending on need. After discussing with the kitchen staff we estimated there is about 100 pounds per week of food waste produced. After discussing this information with Lydia, from Garbage to Garden, she recommended the school have a 32-gallon bin in the cafeteria where the trash receptacle is already in place and another placed in the kitchen. She suggested we have four toters in total, so we could switch them out once the first one was full in an area. Lydia indicated Garbage to Garden would also provide the signage and a presentation to

students and staff on how to sort/separate waste. She provided me with a formal service proposal, which I then shared with the Senior Director of my school.

Please see appendix A for formal service proposal.

3.2 - Budget

After receiving the formal service proposal it was determined that it would be a monthly flat rate cost of \$190 or \$2,280 for the year. As school budgets are often strained I decided I would apply for multiple grants to help fund the first year of the program. The goal would be to fund the first year of the composting program through grant money with hopes of creating community buy-in and establishing composting as a new means of food waste management. I plan to compare waste removal costs for the first year of composting to previous years to see if there was reduction in cost due to removing most food waste from dumpsters. I am hoping the savings from waste removal cost could then be used to fund the composting program in the future.

3.3 – Education

For this program I created five simple educational activities to introduce composting to the students at my school. As I mentioned before academics are an area of struggle and many students at the school vary greatly in ability and age. I created activities that were short and engaging in an attempt to capture the focus of the kids before they disengage. These activities do not necessarily need to be done in any specific order, which is important as students often come and go throughout the year. Each activity outlines composting at a basic level to help create a sense of understanding and investment to the composting program. To kick off the program I plan on doing a compost awareness week where students will be given a raffle ticket everyday they compost correctly and there will be a drawing at the end of the week. Students can also

participate in a sign-making contest to teach their peers about composting. I plan to repeat the raffle ticket contest the first week of May, International Compost Awareness Week, as a way to check in with students and provide opportunities for new students to learn more about composting correctly.

Chapter 4 – Product

I created five educational activities that will be used to help roll out the program along with the educational material provided by Garbage to Garden. You will find the educational activities under appendix B. All grant proposals are previews as the official grants are to be completed online. You will find the grant proposals under appendix C.

Appendix B: Five classroom activities to kick off the Eslie J. Parquette School composting program with Garbage to Garden

- Activity 1: What is Compost?
- Activity 2: Is it Trash, is it Compost, or is it Recycling?
- Activity 3: Trash Timeline
- Activity 4: Garden Sustainability
- Activity 5: Food for Thought

Appendix C: Grant Proposals

- Grant 1: Onion Foundation: 2020 Discovery Grants
- Grant 2: Maine Agriculture in the Classroom Council Grant Program

Chapter 5 – Reflection

Developing a composting program for my school was both challenging and exciting. I think the program has a lot to offer, both students and staff, and is another great way to make community connections. Many of my students, or even my co-workers, have not been exposed to composting, so this is a great opportunity to educate people on the issues of food waste. My hope is that this project will create opportunities for growth by challenging people's current thought processes and offer them a chance to build a community around compost. If this composting program proves successful at the school I would love to see it branch out to other parts of campus. Our residential programs, adult and youth crisis units, administrative offices and the New England Eating Disorder clinic all share the campus with the Esle J. Parquette School. By incorporating all of these programs into the composting project it can teach people to make informed decisions about food and help to build a sustainable campus for the future.

There are areas of the project I believe as though could have been developed further, as I found it hard to create learning activities that balance the needs and abilities of the students. In the future I would like to develop a curriculum surrounding composting or at least more educational activities to build upon students' knowledge around composting. I find my students having a small window of time where they are able to sit and focus on a lesson, so I would continue to make short, interactive lessons to maintain student engagement.

Although I have hope for this program I do have some concerns. Everyone is already so busy and there is always the concern people will lose interest in the project and it will fall by the wayside. This will be a challenge for me in the future to maintain enthusiasm for composting by continuing to find ways to engage staff and students. There is also the concern of the budget, and how the program will continue to be funded in the future. After the first year I will need to find a

way to continue to pay for the composting service. I am hoping to show by incorporating compost as part of the waste removal process on campus we will save money on dumpster pick up and could then allocate those funds towards future composting costs. Another concern for this program is property destruction. Despite staff and student buy-in things on campus often get destroyed and I fear this could be a set back for the program if the composting equipment or posters are destroyed.

The most challenging part of this whole process for me was finally deciding what project I wanted to focus on for my creative component. I had so many ideas, but this year has been particularly challenging with my students, so I struggled to find the time to focus on one. Earlier in the school year I had attended the Maine Ag in the Classroom conference where I heard multiple speakers and attendees talking about how they made compost work at their school. The real motivation to start this project came from a student who asked me how we could start composting at our school. It was encouraging to know that kids were interested in composting and I was excited to find a way to make it work at our school. Although this project is just a plan to start composting I am passionate about making this program work. My hope is that when the pandemic ends and students return to school we will be able to introduce them to the composting program.

Overall I found my graduate degree to be challenging and exciting. I was initially nervous about participating in an online degree, as I was worried I would miss out on the personal connections made while in the classroom. Fortunately, my classes have provided multiple opportunities to make connections with my classmates through many different approaches. I have found that all of my professors were easily reached at almost any time and have always felt supported from halfway across the country. I enjoyed taking classes with students from around

the United States as it provided a unique opportunity to see how agricultural education is approached differently. Although Maine has a lot of agricultural history there isn't many opportunities for Maine students to participate agricultural education. From my peers and my classes I have learned about many different organizations and resources that I can use while teaching my students and for future endeavors.

The Agricultural Education Master's program at Iowa State University has helped me become a stronger, well-rounded educator. My undergraduate degree was in environmental science, so this was my first opportunity for formal education about education. I have learned about program planning, curriculum building and about myself as a learner and teacher. My classes have helped me identify my teaching methods and approaches, which has allowed me to grow as an educator. This program has showed me there are many opportunities within agriculture education where I can apply my degree now and in future opportunities.

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Appendix A

A copy of the formal service proposal from Garbage to Garden. This outlines the monthly cost and summarizes the other services provided in the contract.



Eslie J. Parquette School

Company: Garbage to Garden
 Project/Work: Organic Waste Recycling
 Contact Name: Lydia Foxall
 Contact Number: 207.332.0277

03/09/20

Contact Information

Angelica Anders
 a_marie327@yahoo.com

Compost Collection			
	Toter/Units	Frequency	Billing Rate
Compost	4x32-gallon toter	Once weekly	\$190.00 Flat Rate
Monthly total			\$190.00

Program Support

- Garbage to Garden can and will:
 - Provide the equipment and systems necessary to make the service financially efficient and environmentally sustainable.
 - Provide service for toters once weekly. Service takes place either curbside or at an outdoor trash corral.
 - Provide biodegradable liners to improve cleanliness.
 - Provide toter cleaning - pressure wash each on site with every service during spring, summer, and fall. Toters can be swapped out upon request.

Educational Support

- Garbage to Garden can or will:
 - Provide generic or custom sorting signs for the recycling and composting station.
 - Provide introductory presentation to staff/residents/students upon request.
 - Provide ongoing waste audit detailing the total amount of organic material recycled to-date for to track progress on monthly invoices.
 - Provide on-going feedback and training as needed, including refresher presentations on request.

Invoice Method

- Monthly may invoices or statements are e-mailed or mailed, and payment is made via credit card or check.
- All invoices are to be paid within 30 days of receipt.



Appendix B

COMPOST AWARENESS WEEK

Five classroom activities to kick off the Esle J. Parquette School composting program with Garbage to Garden



(Garbage to Garden, 2020)

These activities can be completed at any time and in any order. Students should be active participants in each activity.

Activity 1: **What is Compost?**

Activity 2: **Is it Trash, is it Compost, or is it Recycling?**

Activity 3: **Trash Timeline**

Activity 4: **Garden Sustainability**

Activity 5: **Food for Thought**

ACTIVITY 1: WHAT IS COMPOST?

Purpose: To introduce the concept of composting

Discussion: Compost – What is it?

- Compost is a dark, crumbly and earth-smelling form of decomposing organic matter
- Compost is a practical way to handle food and yard waste
- Compost improves soil
- Increases soil's ability to hold water
- Loosens clay soils and helps sandy soils retain water
- Adding compost improves soil fertility and stimulates healthy root development in plants
- Organic matter in compost provides food for microorganisms, which keep soil in a healthy, balanced condition
- Potassium, nitrogen, and phosphorus will be produced naturally

Activity: After talking with the students about what composting is have them make their own sandwich bag compost. Once the contents of the sandwich bag has broken down students will use their compost to plant a seed and then compare that to the same type of seed planted in regular soil.

Part 1: Snack Bag Compost

Materials:

Re-sealable plastic bag

Paper (newspaper or egg carton)

Straw

Water

Food Waste (fruit, veggies, coffee grounds, egg shells)

Step 1: Rip of pieces of uncolored paper to prevent the compost from getting too wet.

Step 2: Add paper and food waste to the re-sealable bag. The bag should be 60% food waste and 40% paper.

Step 3: Place a straw in the corner of the bag and re-seal to allow air in.

Step 4: Gently mix the compost by squishing the bag and add a few drops of water if it seems dry.

Step 5: Keep the compost bag in a sunny spot and squish the compost a couple of times a week to keep the process going.

Part 2: Compare and Contrast

Materials:

Two pots of the same size

Soil

Your sandwich bag compost

Water

Step 1: Fill one pot with your sandwich bag compost and fill the other pot with regular soil. Make sure you label which is which.

Step 2: Plant a seed in each pot

Step 3: Place your plants in a sunny spot and remember to water them occasionally

Step 4: Watch the plants grow and have students record the differences.

ACTIVITY 2: IS IT TRASH, IS IT COMPOST, OR IS IT RECYCLING?

Purpose: To teach students about what they can and cannot compost

Discussion: Ask students what kinds of things are compostable? Things that are recyclable? What is just trash? Then talk with the students about how anything that was once alive can be composted. Depending on the method of composting sometimes things like meat, bones and fatty foods cannot be composted. At Garbage to Garden they follow the “if it grows it goes” as a rule for their compost and therefore we will be able to put all food waste in our compost bins.

Activity: Place each word in the correct category.

ecomaine		Is it trash, recycling, or compost?	
Instructions: Sort the items below into the correct columns.			
Recycle	Compost	Trash	
Milk jug Empty pen Napkins Soup can Cereal box Junk mail Gum	Paper towels Cardboard box Magazines & newspapers Orange peels Diapers Jam jar Plastic fork	Moldy strawberries Straw Apple core Banana peel Chip bag Dog poop Egg shells	

(Ecomaine, 2020)

ACTIVITY 3: TRASH TIMELINE

Purpose: To make students aware of how long it really takes for garbage to decompose

Discussion: Take students for a walk around campus and have them pick up garbage they find along the way. After the walk around campus have students return to class and ask kids where they think trash goes once you no longer want it? Then ask them what they think happens once garbage ends up in landfills.

Activity: Pass out an index card to each student that has the word of a piece of garbage that is commonly found tossed outside. Have the students line up by how long they think it will take them to decompose (Ask kids if they know what it means to decompose and define it). Then share with students the correct order and talk with them about how long it actually takes for those things to decompose.

List of Objects in Order:

BANANA: 3 to 4 weeks

PAPER BAG: 1 month

COTTON RAG: 5 months

WOOL SOCK: 1 year

CIGARETTE BUTT: 2 to 5 years

LEATHER BOOT: 40 to 50 years

RUBBER SOLE (BOTTOM OF YOUR SHOE): 50 to 80 years

TIN CAN (SOUP OR VEGETABLE CAN): 80 to 100 years

ALUMINUM CAN (SODA): 200 to 500 years

PLASTIC 6-PACK RINGS: 450 years

PLASTIC JUG: 1 million years

STYROFOAM CUP: unknown, maybe forever

GLASS BOTTLE: unknown, maybe forever

ACTIVITY 4: GARDEN SUSTAINABILITY

Purpose: To connect composting and garden sustainability

Discussion: Read or have the students read the facts about gardens and our gardens at Ricker Farm. Talk with students about what sustainable means and the difference between organic and inorganic.

Sustainable: a method of harvesting or using a resource so that the resource is not depleted or permanently damaged

Organic: No chemicals used

Inorganic: fertilizers, growth stimulants, antibiotics, or pesticides made from chemicals

Garden Facts

- A sustainable organic garden can continue indefinitely, but require compost and worm castings
- In order for unsustainable garden to prosper, the addition of chemical fertilizers is necessary. Energy is consumed in producing these fertilizers. Fertilizers' runoff can cause water pollution in streams
- Inorganic fertilizer use leads to surface runoff or groundwater seeping, which can be dangerous for the plants and animals leaving in the area.
- Most organic fertilizers provide increased physical and biological storage mechanisms
- Chemical fertilizers can cause emissions of the greenhouse gases
- About 60% of waste is recyclable
- 1/3 space in landfills is taken up with organic waste from our yards and kitchens, which could be composted

Ricker Farm Garden

- The farm's gardens are ORGANIC meaning no chemical fertilizers, pesticides, or herbicides instead we use COMPOST
- The farm gets our water from the rain
- We use hay and landscape fabric to act as mulch
 - Mulch: material that keeps moisture in the soil, which helps conserve water. Also helps to regulate soil temp, reduce weeds, and add nutrients during decomposition

Activity: **Apple Activity:** Talk with students about how much of the earth they think is available for planting food crops.

- Start off with the 75% of the earth that is water. Cut the apple into fourths and set three of them aside to be the area covered in water.
- Cut the remaining fourth in half. One half represents the deserts, wetlands, and arctic areas that are unsuitable for agriculture.

- Then cut that half in to fourths. Three of the fourths represent land that is available for agriculture, but that is too rocky, wet, hot, or nutrient-poor for crop production. The section that is left is 1/32 of the original apple.
- Peel the skin of the apple. This little peel represents the thin layer of topsoil that is available on all the earth to produce food for our 6 billion and counting humans.
- Composting helps our soil by reintroducing nutrients which keeps the topsoil we have healthy

COMPOSTING AND THE GARDEN

A	O	T	S	O	P	M	O	C	E	C	E	R	B
C	I	P	O	C	S	O	R	C	I	M	N	A	A
F	E	R	T	I	L	I	Z	E	R	F	G	C	C
N	A	T	U	R	E	C	O	N	O	R	A	A	T
U	E	N	S	V	L	I	R	E	E	R	T	I	E
E	E	E	E	H	E	A	T	E	B	O	A	P	R
O	C	D	T	E	T	N	N	O	A	G	C	O	I
U	U	R	N	G	N	G	N	A	W	L	O	M	A
N	D	A	A	R	E	R	U	N	A	M	U	V	W
G	E	G	L	O	U	E	S	U	E	R	W	L	W
M	R	O	P	W	O	R	G	A	N	I	C	A	B
N	I	E	E	T	A	W	A	S	T	E	T	R	N
T	N	E	M	N	O	R	I	V	N	E	P	O	R
N	U	T	R	I	E	N	T	E	R	M	R	O	W

ORGANIC
 WATER
 REUSE
 CARBON
 FERTILIZER
 GROW
 GREEN
 COMPOST
 MICROSCOPIC
 REDUCE
 ENVIRONMENT
 PLANT
 WASTE
 BACTERIA
 GARDEN
 NUTRIENT
 HEAT
 NATURE
 MANURE
 WORM

ACTIVITY 5: FOOD FOR THOUGHT

Purpose: To wrap up what we have learned about composting and sustainability

Activity: Have students write a journal entry, a poem, a story, or make a poster about what they have learned this week about composting. Have them share their products with the class if they are comfortable. The submissions will be hung up in the display cases in the hallway to be shared with the school.

Appendix C

Onion Foundation: 2020 Discovery Grants

Proposal Details

Decisions will be announced within 3 weeks of application submission. We pause reviewing applications during our spring/fall grant rounds (generally March and October) and the winter holidays so decisions may be delayed if applications are received during those times.

The Onion Foundation accepts applications across all mission areas (Arts, Music, Environment, Climate Change, Healthy Living, Food Systems) for Discovery Grants.

Project Title*

From Cafeteria to Classroom: A composting program design for the Esle J. Parquette School

Project Focus Area(s)*

Choices

Arts

Music

Environment

Climate Change

Healthy Living

Food Systems

SHORT Project Summary*

Please concisely describe the details of your project.

This project is designed to bring composting to the school to address the issues of food waste on campus and to teach students about the next step in the food process. On campus we have a working farm where students are taught where their food comes from so introducing composting would be a great way to complete the cycle and teach kids where their food goes once they are done. This school will be working with the Garbage to Garden program, which provides a curbside compost service to schools, commercial businesses and homes. Garbage to Garden provides educational signage and training to staff and students. The compost toters will be present in the cafeteria and kitchen to be used by all students

and staff for lunch, snack and dinner waste and will be collected weekly and taken off site by Garbage to Garden.

What challenge(s) or question(s) are being addressed by your project?* Why is your project important and innovative to your community?

Food waste is a worldwide issue. In the United States more than four billion lunches are served everyday and regrettably a portion of that gets wasted. The Esle J. Parquette school provides every student with a lunch, snack, and for residential clients dinners, but unfortunately a lot of that food is discarded. Composting is one of the many approaches to reducing food waste, and can provide a unique opportunity to raise awareness and education about how much food is thrown away. Incorporating composting as a teaching method and waste reduction tool opens up cafeterias to become classrooms and provides students with the chance to learn healthy life skills for the future. The purpose of this program is to create a sense of awareness about the issue of food waste and to create another positive connection with the world around them.

How is this project new and/or how does it respond to an unforeseen challenge or opportunity?* Discovery Grants are designed to help organizations spark something fresh and independent from their day-to-day operations or to solve a new problem, not to fill in funding for an existing project or budget item.

I have been considering how to bring composting to my school for some time, but finding the resources to do the whole compost process was a challenge. I started researching an outside source to pick up our compost therefore eliminating some of the responsibility from the school staff. I reached out to Garbage to Garden, as a potential resource, as they provide training, educational tools, bins for easy pick up and have found a lot of success in school settings. This would allow students the opportunity to learn about composting and food waste, but would not put a heavy burden on staff.

Who is involved in the work?* We are interested in the perspectives and skill sets represented. Provide a short list of stakeholders and/or partners.

Garbage to Garden will be providing the off site composting service along with educational materials, signage, and training for staff and students to learn about composting.

Population Impacted and/or Served*

Describe the community or people who will be most impacted by your project or organization.

The Esle J. Parquette School is a private special purpose school that provides special education curriculum to support students struggling with social, emotional, and academic challenges to students K-12. This project would directly impact students and staff working at the school, as they would be active participants in composting lunches and snacks, and the kitchen staff will compost waste produced while making lunches and dinners. The goal of this program is to create the opportunity for students to learn healthy life skills they can carry with them and share with the community around them.

OPTIONAL: Online Resources

<https://www.sweetser.org/programs-services/services-for-children-families/residential-educational-services/special-purpose-private-schools/>

<https://www.garbagetogarden.org/>

Project Start Date* September 1st, 2020

Project End Date* August 31st, 2021

Geographic Area Served*

Please select the Maine county or counties your project will impact.

Choices

Androscoggin County Aroostook County **Cumberland County** Franklin County
Hancock County Kennebec County **Knox County** **Lincoln County** **Oxford County**
Penobscot County Piscataquis County **Sagadahoc County** Somerset County Waldo
County Washington County **York County** Entire State

The Esle J. Parquette School provides educational services to students from multiple counties throughout the state of Maine.

OPTIONAL: Physical Location of the Project

The project will be located at the Esle J. Parquette School at 50 Moody Street in Saco, Maine.

Organization Details

Organization Mission Statement*

Sweetser's mission is to provide quality treatment, support and hope to children, families and adults through a network of mental and behavioral health, developmental, and educational services.

Financial Details

Organization's Annual Operating Budget*

\$71,448,665

Amount Requested for this Project from the Onion Foundation* Discovery
Grants range from \$500-\$2,500

I am requesting \$2,500 dollars

How will the money be used?*

Provide overall summary and details about total project budget and allocation of Onion Foundation funds.

I am requesting \$2500 to cover the cost of one year of composting through Garbage to Garden. It was determined that it would be a monthly flat rate cost of \$190 or \$2,280 for the year. The remaining \$220 would go to buying five gallon buckets and lids to be used as classroom and offices as compost buckets that can be dumped into the large compost toters in the cafeteria or kitchen.

OPTIONAL: Upload your project budget

A copy of the formal service proposal from Garbage to Garden. This outlines the monthly cost and summarizes the other services provided in the contract.



Eslie J. Parquette School

Company: Garbage to Garden
Project/Work: Organic Waste Recycling
Contact Name: Lydia Foxall
Contact Number: 207.332.0277

03/09/20

Contact Information

Angelica Anders
a_marie327@yahoo.com

Compost Collection			
	Toter/Units	Frequency	Billing Rate
Compost	4x32-gallon toter	Once weekly	\$190.00 Flat Rate
Monthly total			\$190.00

Program Support

- Garbage to Garden can and will:
 - Provide the equipment and systems necessary to make the service financially efficient and environmentally sustainable.
 - Provide service for toters once weekly. Service takes place either curbside or at an outdoor trash corral.
 - Provide biodegradable liners to improve cleanliness.
 - Provide toter cleaning - pressure wash each on site with every service during spring, summer, and fall. Toters can be swapped out upon request.

Educational Support

- Garbage to Garden can or will:
 - Provide generic or custom sorting signs for the recycling and composting station.
 - Provide introductory presentation to staff/residents/students upon request.
 - Provide ongoing waste audit detailing the total amount of organic material recycled to-date for to track progress on monthly invoices.
 - Provide on-going feedback and training as needed, including refresher presentations on request.

Invoice Method

- Monthly may invoices or statements are e-mailed or mailed, and payment is made via credit card or check.
- All invoices are to be paid within 30 days of receipt.



Tax Status

Is your organization a 501(c)3 as designated by the IRS?*

Choices

Yes

No

No, we operate under a fiscal agent.

Reporting & Application Process

Reporting*

If awarded, we'd like to hear how your project is progressing in about 6 months (if there is a better time for you or the project, please let us know this!). Would you prefer to have a phone call or submit a simple written report?

20-Minute Phone or Video Call

OPTIONAL: How did you learn about the Onion Foundation?

I found this grant while researching Maine environmental grants.

IMPORTANT: Please note that emails from the Onion Foundation grant portal come from this address: adminstrator@grantinterface.com. Please add this address to your email contacts to ensure emails from the Foundation appear in your inbox.

Thank you for your submission. We look forward to reading your proposal! We will respond with our decision within three weeks of application submission.

Required Application Components

- Completed Cover Page Form
- Project overview – 1 short paragraph for media use (50 words or less)
- Description of the project (agricultural education objectives, duration of student involvement and target audience, 3 page maximum)
- Budget (including explanation)
- Timeline
- Impact (assessment tools and expected outcomes)



Maine Agriculture in the Classroom Council Grant Program - Cover Form 2020

PROJECT NAME: From Cafeteria to Classroom: A composting program design for the Esle J. Parquette School

***PROJECT DIRECTOR:** Angelica Anders

***PHONE:** 207-294-4740

***HOME ADDRESS:** 276 Park Road

***CITY:** Westbrook

***ZIP CODE:** 04092

***E-MAIL ADDRESS:** aanders@sweetser.org

***SCHOOL OR ORGANIZATION:** Esle J. Parquette School

***ADDRESS:** 50 Moody Street

***CITY:** Saco

ZIP CODE: 04072

***PROOF OF NON_PROFIT STATUS (501(c) Number or can attach letter):** 01-0211807

***GRANT CATEGORY_-** ☐ Ag Leadership (up to \$1,000)

(Choose one)

☐ Ag Awareness (up to \$1,000)

☐ School Garden & Greenhouse (up to \$2,000)

☒ Ag Awareness (up to \$2,000)

☐ Ag Education Organization Grant – Statewide programs only (up to \$2,000)

***FUNDS REQUESTED:** \$2,000

***NO. OF STUDENTS IMPACTED:** 75

***HOW OFTEN AND HOW LONG ARE STUDENTS OR EDUCATORS ENGAGED?** During the initial roll out week each student should receive approximately two hours of education to learn about composting. After students will be composting everyday at lunch with periodic check-ins and composting awareness weeks where students will be able to earn prizes for composting correctly.

CO-PROJECT DIRECTOR (S) NAME AND EMAIL: Jason Gregoire jgregoire@sweetser.org

By signing and submitting this proposal the applicant(s) certifies that the information contained herein is true and complete to the best of his or her knowledge and accepts the obligation to comply with the terms and conditions of the Maine Agriculture in the Classroom Council in effect at the time of the award. **All* information is mandatory.** Applications with missing mandatory information may be eliminated from consideration. Grant checks will be written to, and mailed to, the school or organization with Attention to the Project Director.

***SIGNATURE OF PROJECT DIRECTOR**

DATE

Angelica Anders

April 19, 2020

SIGNATURE OF CO-PROJECT DIRECTOR (S)

DATE

Jason Gregoire

April 19, 2020

Project Overview:

This project will bring composting to the school to address the issues of food waste and teach students about the next step in the food process. We will partner with Garbage to Garden, which provides a curbside compost service, along with educational materials and training for staff and students.

Description of Project:

Food waste is a worldwide issue. In the United States more than four billion lunches are served everyday and regrettably a portion of that gets wasted. The Esle J. Parquette School provides every student with a lunch, snack, and dinner for residential clients, but unfortunately a lot of that food is discarded. Composting is one of the many approaches to reducing food waste, and can provide a unique opportunity to raise awareness and education about how much food is thrown away. Incorporating composting as a teaching method and waste reduction tool opens up cafeterias to become classrooms and provides students with the chance to learn healthy life skills for the future. The purpose of this program is to create a sense of awareness about the issue of food waste and to create another positive connection with the world around them.

I had been considering how to bring composting to my school for some time, but finding the resources to do the whole composting process was a challenge. This school year a student in the culinary program approached me about what it would take to start composting at school. I started researching an outside source to pick up our compost therefore eliminating some of the responsibility from the school staff. I reached out to Garbage to Garden, as a potential resource, as they provide training, educational tools, and bins for easy pick up. The compost toters will be present in the cafeteria and kitchen to be used by all students and staff for lunch, snack and dinner waste and will be collected weekly and taken off site by Garbage to Garden. This would allow students the opportunity to learn about composting and food waste, but would not put a heavy burden on staff. This project is designed to bring composting to the school to address the issues of food waste on campus and to teach students about the next step in the food process. The school has a working farm where students are taught where their food comes from so introducing composting would be a great way to complete the cycle and teach kids where their food goes once they are done.

Once we obtain the funds everything is set up with Garbage to Garden to begin the process of composting on campus. The program would start with training from Garbage to Garden for staff and students to learn how to compost. To kick off the program I plan on doing a compost awareness week where students will be given a raffle ticket everyday they compost correctly and there will be a drawing at the end of the week. Students can also participate in a sign-making contest to teach their peers about composting. I plan to repeat the raffle ticket contest the first week of May, International Compost Awareness Week, as a way to check in with students and provide opportunities for new students to learn more about composting correctly. I also plan to repeat composting awareness weeks and random compost check in days to keep everyone engaged and educated about the composting process. You can also get compost back from Garbage to Garden creating an opportunity for teachers to utilize composting in planting projects with their class.

Budget:

I am requesting \$2000 to cover most of the cost of one year of composting through Garbage to Garden. It was determined that it would be a monthly flat rate cost of \$190 or \$2,280 for the year. The remaining cost would be absorbed by the school budget. The goal would be to fund the first year of the composting program through grant money and then I plan to compare

waste removal costs for the first year of composting to previous years to see if there was reduction in cost due to removing most food waste from dumpsters. I am proposing that the savings from waste removal cost could then be used to fund the composting program in the future.

Timeline:

This program will run for one school year with an ideal start date of the beginning of the school year. As mentioned above there will be a roll out week where the process of composting is introduced and students are given the chance to get comfortable with composting. Every other month there will be a composting awareness week where students can receive tickets for composting correctly and random composting check-in days to keep students educated and engaged. The composting awareness weeks and check-in days will allow any new students a chance to learn the process and will remind students of steps they may have forgotten. The kitchen staff will be responsible for taking care of their kitchen waste and teachers and students will be responsible for managing their classroom and cafeteria food waste. After the first year of the program the goal is to continue with the program through alternative means of funding.

Impact:

The Esle J. Parquette School is a private special purpose school that provides special education curriculum to support students struggling with social, emotional, and academic challenges in grades K-12. This project would directly impact students and staff working at the school, as they would be active participants in composting lunches and snacks, and the kitchen staff will compost waste produced while making lunches and dinners. The goal of this program is to create the opportunity for students to learn healthy life skills they can carry with them. Composting offers teachers and students learning opportunities and chances for growth by challenging their current thought processes and providing topics for exploration. Allowing students to take part composting in the cafeteria builds a sense of ownership and environmental stewardship that they can bring home to their families and with them in the future. The composting awareness weeks and random compost check-ins will hopefully provide a way to assess staff and students learning and understanding of the composting process. My hope is this program will create a sense of community buy-in and establish composting as a new means of food waste management.